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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,491	03/23/2004	Robert J. Zolla	87596PCW	3050
7590 12/01/2005			EXAMINER	
Pamela R. Crocker Patent Legal Staff Eastman Kodak Company 343 State Street Rochester, NY 14650-2201			ROGERS, SCOTT A	
			ART UNIT	PAPER NUMBER
			2627	

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/807,491	ZOLLA ET AL.	
	Examiner	Art Unit	
	Scott A. Rogers	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,6,8,12,13,17,19 and 21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6,8,12,13,17,19 and 21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/23/04 & 6/30/05</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of claims 2, 6, 8, 12, 13, 19, and 21 (species A1, B2, and C2) in the reply filed on 02 November 2005 is acknowledged. The elected claims and generic claims 1 and 17 are addressed below. All other claims were canceled.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Kim et al (US 2005/0167505 A1).

Kim et al disclose a method of recording a watermark pattern on a color recording medium that forms an image using a number N of colorants, the method comprising the step of forming the watermark pattern using at least two colorants, but fewer than N colorants (see paragraphs 9, 13, 18, and 60).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 6, 8, 12, 17, 19, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lowe et al (US 2003/0012569 A1) in view of Kim et al (US 2005/0167505 A1).

Referring to claim 1:

Lowe et al disclose recording a watermark pattern on a recording medium (see abstract and paragraphs 8 and 11).

While Lowe et al disclose that the watermark may be polychromatic, they do not specifically disclose forming the watermark pattern on the recording medium using at least two colorants, but fewer than N colorants.

Kim et al disclose recording the watermark pattern (3-D code pattern) on a color recording medium using at least two colorants, but fewer than N colorants (see paragraphs 9, 13, 18, and 60).

It would have been obvious to one of ordinary skill in the art to have combined the watermark pattern forming application taught by Lowe et al with the color code pattern recording application taught by Kim et al in order to provide high-density and robust or redundant data embedding and thereby enable embedding of a relatively large amount of data and greater range of applications.

Referring to claim 2:

Lowe et al disclose forming the watermark pattern by applying exposure energy onto the recording medium (see paragraphs 11, 13 or 14).

Referring to claim 6:

Lowe et al disclose use of a photosensitive recording medium (see abstract and paragraph 8).

Referring to claim 8:

Lowe et al disclose the recording medium as a motion picture negative (see abstract and paragraph 12).

Referring to claim 12:

Lowe et al disclose the exposure energy as light (see paragraphs 11, 13 or 14).

Referring to claim 17:

Lowe et al disclose recording a watermark pattern on a photosensitive recording medium (see abstract and paragraphs 8 and 11).

Lowe et al does not specifically disclose the recording medium having at least a cyan colorant-producing component, a magenta colorant-producing component, and a yellow colorant-producing component, and does not disclose the step of exposing the watermark pattern to both the magenta colorant producing component and the yellow colorant producing component but not to the cyan colorant producing component of the color recording medium.

Kim et al disclose recording a watermark pattern (3-D code pattern) on a color recording medium having at least a cyan colorant-producing component, a magenta

colorant-producing component, and a yellow colorant-producing component (see paragraph 41). Kim et al further disclose the step of forming the watermark pattern on a recording medium using both a magenta colorant producing component and the yellow colorant producing component, but not a cyan colorant producing component (see paragraphs 9, 13, 18, and 60).

It would have been obvious to one of ordinary skill in the art to have combined the watermark pattern forming application taught by Lowe et al with the color code pattern recording application taught by Kim et al in order to provide high-density and robust or redundant data embedding on a color photosensitive recording medium having multiple colorant producing components, thereby enable embedding of a relatively large amount of data and greater range of applications with such a recording medium.

Referring to claim 19:

Lowe et al disclose the step of forming a watermark pattern by exposure of the recording medium being performed prior to exposure of the recording medium to image content (see abstract and paragraph 11)

Referring to claim 21:

Lowe et al disclose the recording medium as a motion picture negative (see abstract and paragraph 12).

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lowe et al and Kim et al as applied to claim 2 above, and further in view of well known prior art.

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Lowe et al only disclose light as the applied exposure energy for forming a watermark pattern on a photosensitive recording medium (see abstract and paragraphs 8 and 11).

The use of heat to thermally record images or patterns on a thermal recording medium is well known in the prior art.

It would have been obvious to one of ordinary skill in the art to have adapted the combination of Lowe et al and Kim et al to form watermark patterns on a thermal recording medium by application of heat energy in order to broaden application of the robust or redundant high-density data embedding technique to a common type of color recording medium that employs the same set of colorants to provide a color image.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 2, and 6 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 46 of copending Application No. 10/778,528. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are anticipated by the copending application claim.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Cited Art

The art made of record and not relied upon is considered pertinent to applicant's disclosure:

Wicker (US 20030030271 A1) discloses superimposed security patterns that must reside in at least two of the color separations and up to and including six of the color separations.


Heckman et al (US 5291243 A) discloses a system of integrated two color security patterns for checks or other security document printing to prevent forgery.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott A Rogers whose telephone number is 571-272-7467. The examiner can normally be reached Monday through Friday 6:00am-2:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached at 571-272-7471.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC2600 Customer Service at 571-272-2600. Official correspondence by facsimile should be sent to 571-273-8300. The USPTO contact Center phone numbers are 800-PTO-9199.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


SCOTT ROGERS
PRIMARY EXAMINER

27 November 2005